

2-Dimensional Code Reader (Fixed Type) V530-R160E, EP

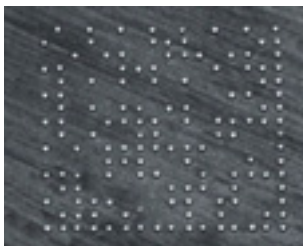
A Code Reader that Handles Pin-Stamped Markings!



Features

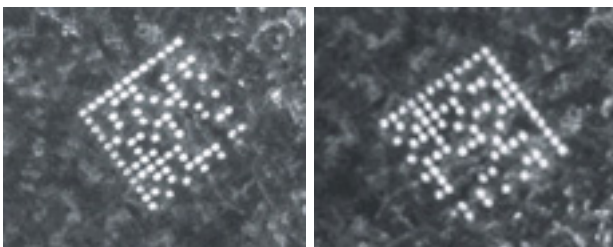
Dependably Read Pin-Stamped Markings

- Markings made by pin-stamping machines can be dependably read, providing the user with a wider range of selection of marking devices.
- Stable reading is possible even if the shape of cells changes because of aging in the marking device.
(Reference: Samples were made using a Vector Co. pin-stamping machine)



Dot Codes* Read at Any Angle: 360° Compatibility

- Codes can be read even with rough backgrounds on the casting surface or other locations.
- Dot codes* can be read at any angle through a 360° range.
* Dot codes are 2-dimensional codes in which dots form the cells.



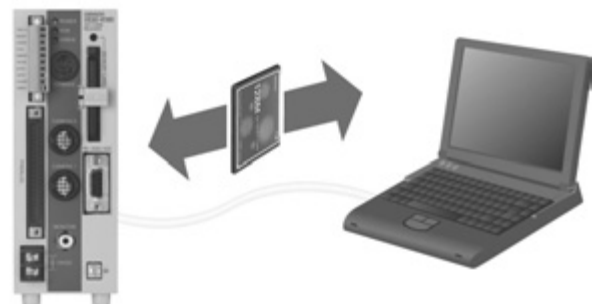
Dependably Read Markings at an Angle

With dependable reading at an angle, installation is possible even on existing facilities with space limitations.



Easy Setup

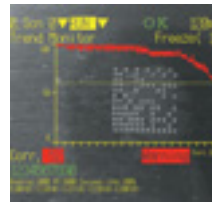
Setup is easily achieved with a Memory Card (compact flash memory) slot on the V530-R160E and V530-R160EP. Just insert a card to easily copy settings or save images. There is no need to carry a personal computer and cables for process switch-overs.



Easy Operation and Maintenance

Trends can be monitored to achieve the following:

- Displaying changes in the status (correlation values) of codes or contrast changes on line graphs on a monitor.
- Setting alarm levels while monitoring graphs.
- Outputting external alarms if a value falls below the set value.



Trend monitoring can be used to set guidelines for replacing parts in lighting devices, marking devices, and other equipment.

Easy Analysis

Manage Data Histories
Histories of the number of OK and NG reads can be managed.



Save Images to Memory Cards
Save approx. 200 images in 64 MB and 400 images in 128 MB.

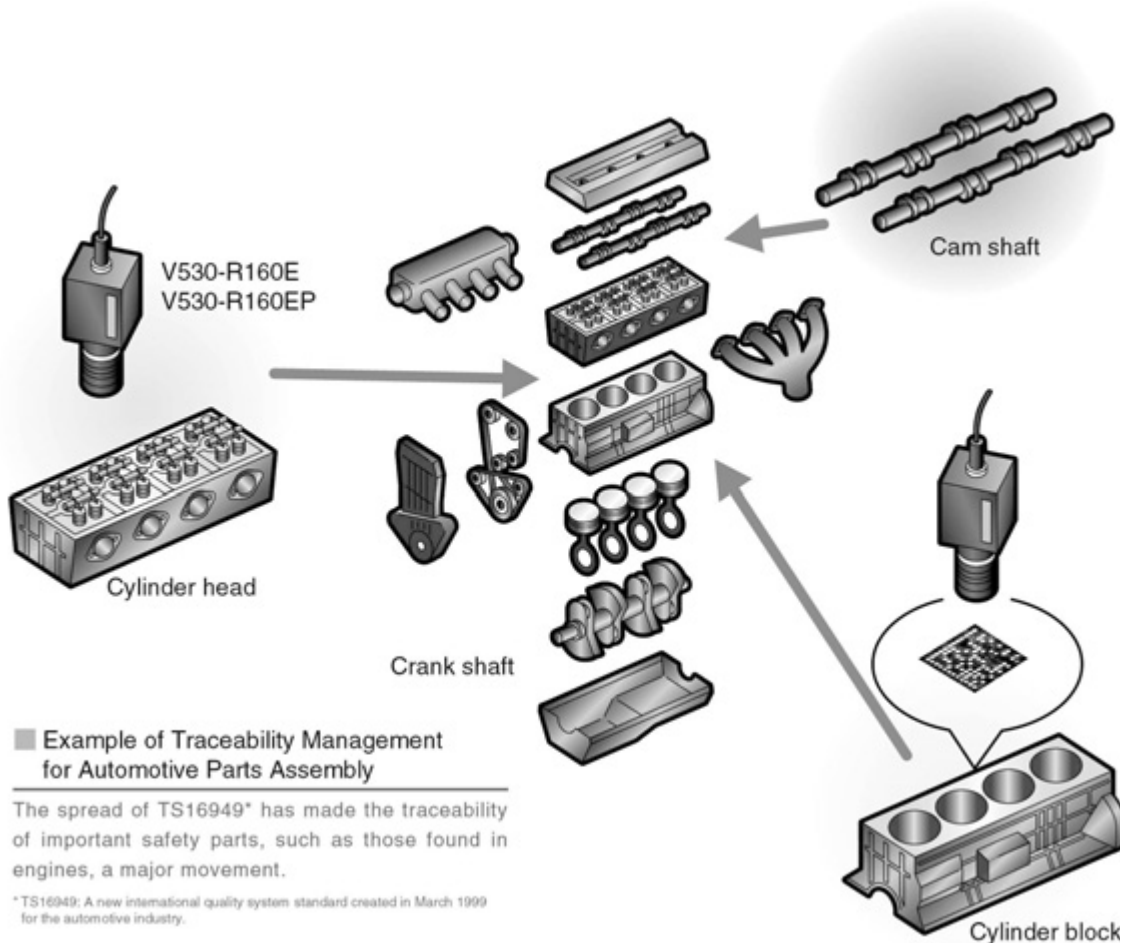
Check and Analyze Troubles
Up to 35 NG images can be saved in internal memory.



Reproduce Images
Saved NG images can be loaded to reproduce a reading.

Using time stamps on NG images with data histories enables more detailed troubleshooting.

Applications



Ordering Information

■ List of Models

Item	Description	Model
Controller	---	V530-R160E, V530-R160EP
Console	2-m cable	F150-KP-2D 2M
Camera	---	F150-S1A-2D
Camera Cable	3-m cable	F150-VS-2D 3M
Monitor Cable	2-m cable	F150-VM-2D 2M
Liquid Crystal Monitor	---	F150-M05L-2D
Video Monitor	---	F150-M09-2D
Parallel Cable	Cable with loose wires for Parallel I/O Connector (2-m cable)	F160-VP
Memory Card	Card capacity: 64 MB	F160-N64S(S)
	Card capacity: 128 MB	QM300-N128S
RS-232C Cable	For IBM PC/AT or compatible computer (2-m cable)	XW2Z-200S-V
	For SYSMAC PLC (2-m cable)	XW2Z-200T

Specifications

V530-R160E, V530-R160EP Controller

Item	Specifications	
Model	V530-R160E	V530-R160EP
Input/Output type	NPN	PNP
Applicable codes	Data Matrix ECC200: 10 × 10 to 64 × 64, 8 × 18, 8 × 32, 12 × 26, 12 × 36, 16 × 36, 16 × 48 Data Matrix ECC000, ECC050, ECC080, ECC100, ECC140: 9 × 9 to 25 × 25 QR Code (Model 1, 2): 21 × 21 to 41 × 41 (Version 1 to 6)	
Readable direction	360°	
Number of pixels (resolution)	512 (H) × 484 (V)	
Number of connectable cameras	2 max.	
Image memory function	Maximum of 35 images stored (internal memory in Controller).	
Operation method	Selected from menu.	
Processing method	Gray	
Memory Card slot	1	
Monitor interface	1 channel (color/monochrome)	
Serial communications	RS-232C/422A, 1 channel	
Parallel I/O	5 inputs: TRIG-A, TRIG-B, TRIG-C, TRIG-D, and RESET 6 outputs: RUN, ERROR, OK/NG, BUSY, GATE, and ALARM	
Power supply voltage	20.4 to 26.4 VDC	
Current consumption	Approx. 1.6 A max.	
Ambient temperature	Operating: 0 to 50°C, storage: -25 to 65°C (with no icing or condensation)	
Ambient humidity	35% to 85% (with no condensation)	
Weight	Approx. 570 g	

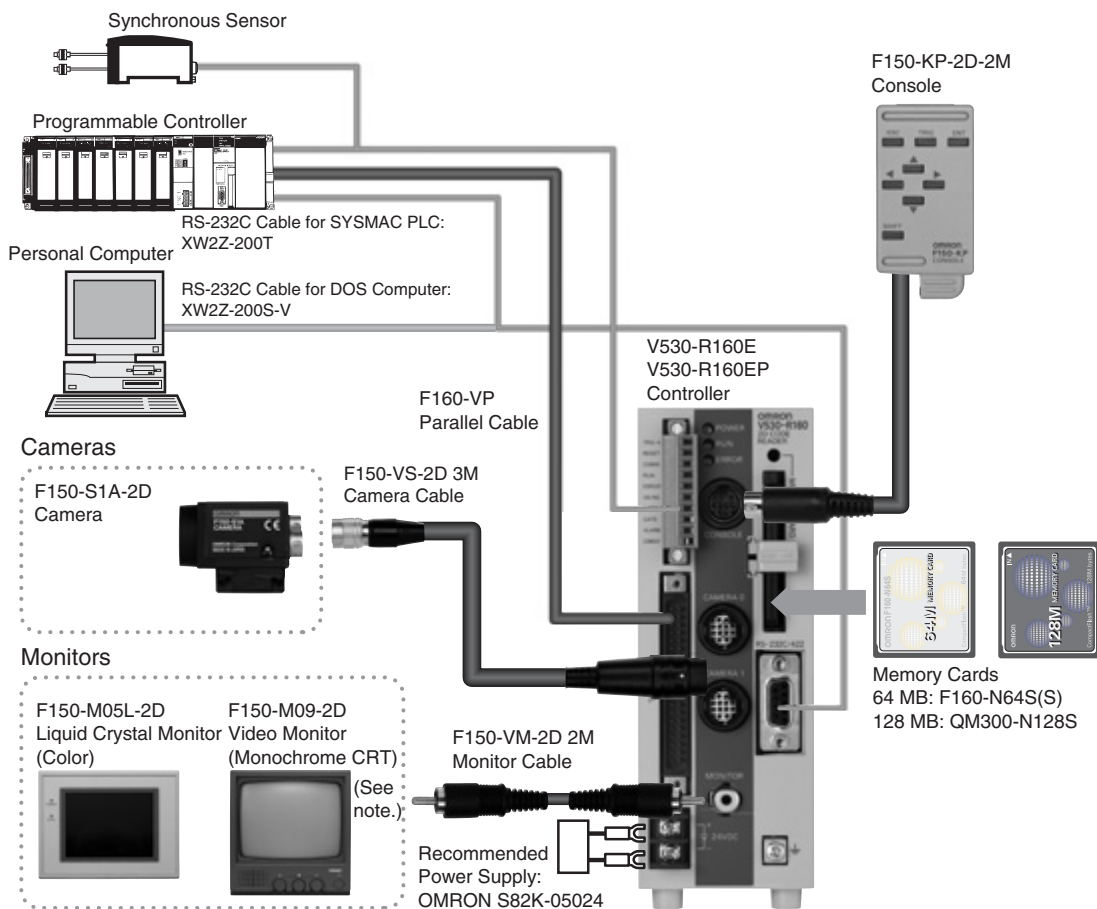
F150-S1A-2D Camera

Item	Specifications
Picture element	1/3-inch CCD
Effective pixels	659 (H) × 494 (V)
Shutter function	Electronic frame shutter Shutter speed: 1/100, 1/500, 1/2000, or 1/10000 s (menu selectable)
Ambient temperature	Operating: 0 to 50°C, storage: -25 to 60°C (with no icing or condensation)
Ambient humidity	35% to 85% (with no condensation)
Weight	Approx. 80 g

Monitor

Item Model No.	Liquid Crystal Monitor F150-M05L-2D	Video Monitor F150-M09-2D
Size	5.5 inches	9 inches
Type	Liquid crystal color TFT	Monochrome CRT
Resolution	320 × 240 dots	800 TV lines min. (at center)
Input signal	NTSC composite video (1.0 V/75 Ω)	
Power supply voltage	20.4 to 26.4 VDC	85 to 264 VAC
Current consumption	Approx. 700 mA	Approx. 200 mA
Ambient temperature	Operating: 0 to 50°C, storage: -25 to 65°C (with no icing or condensation)	Operating: -10 to 50°C, storage: -20 to 65°C (with no icing or condensation)
Ambient humidity	Operating/Storage: 35% to 85% (with no condensation)	Operating/Storage: 10% to 90% (with no condensation)
Weight (Monitor only)	Approx. 1 kg	Approx. 4.5 kg
Accessories	Operation manual, 4 mounting brackets	Operation manual

System Configuration

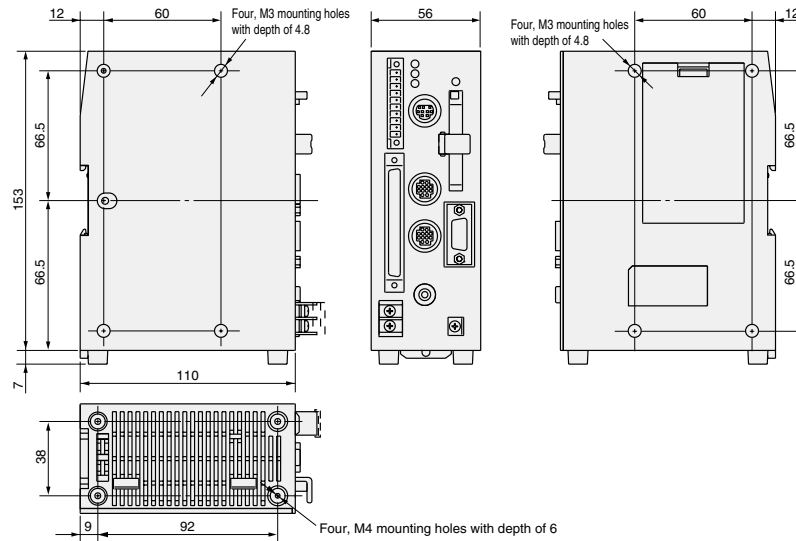


Note: F150-M09-2D does not conform to EC Directives.

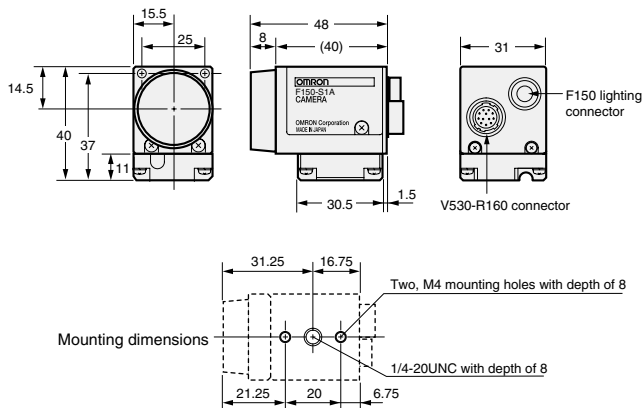
Dimensions

Note: All units are in millimeters unless otherwise indicated.

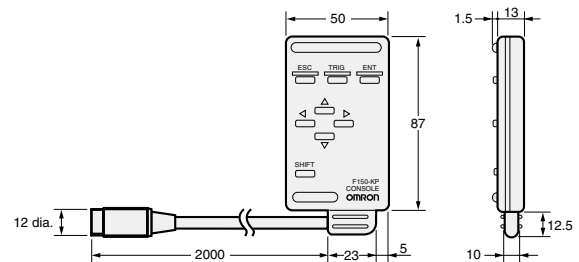
V530-R160E, V530-R160EP Controller



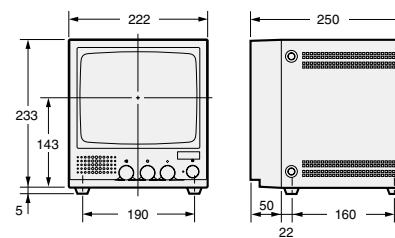
F150-S1A-2D Camera



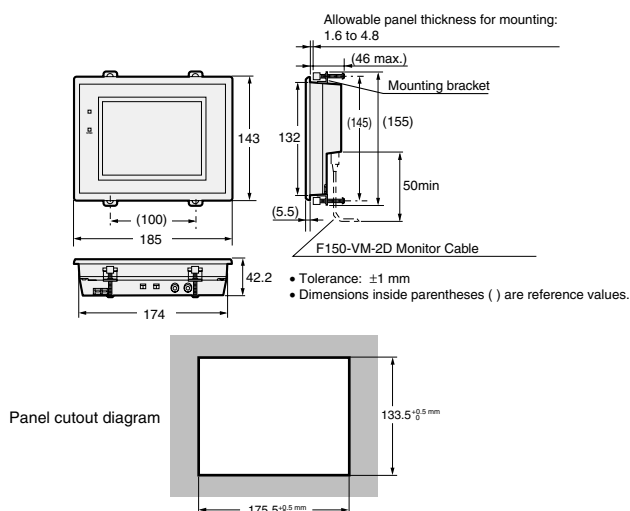
F150-KP-2D-2M Console



F150-M09-2D Video Monitor



F150-M05L-2D Liquid Crystal Monitor



ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

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